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LATE PREHISTORIC COMMUNITY HEALTH IN THE CENTRAL DEEP SOUTH: BIOLOGICAL AND SOCIAL DIMENSIONS OF THE MISSISSIPPIAN CHIEFDOM AT MOUNDVILLE, ALABAMA

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ABSTRACT

A sample of 564 late prehistoric Amerindians from the site of Moundville are examined for evidence of infectious disease, nutritional deficiencies, trauma, and dental pathologies, for the purposes of general health assessment and elucidation of possible biological correlates of social differentiation. Previous mortuary analysis by C.S. Peebles of 2034 burials spanning five centuries (A.D. 1050 - 1550) of Mississippian occupation at Moundville had partitioned the community into a series of hierarchical clusters which crosscut key biological dimensions of age and sex. Analysis of the distribution of observed pathologies indicates statistically significant differences in prevalence and severity between subadults and adults, and to a lesser degree, between adult females and males. With these biological parameters held constant, however, such distributions do not differ significantly along the social dimensions outlined by Peebles, suggesting that disease and developmental experience (as measured by the features examined) did not vary consistently by social rank. The rarity of cribra orbitalia and severe enamel hypolasia suggests that nutrition was generally adequate for normal skeletal and dental development. Trauma is rarely noted, and evidence of serious skeletal involvement from infection of specific or non-specific etiology is uncommon. However, the prevalence of lesions considered specifically characteristic of treponemal disease lends support to arguments by earlier researchers that such a syndrome was present in the pre-Columbian Southeast.

INTRODUCTION

In recent decades, biocultural research on archaeological populations has often focused upon the success of adaptation to a variety of social and ecological environments (Armelagos 1968; Cassidy 1972; Cook 1981; Hoyme and Bass 1962; Kelley 1980; Lallo 1973; Larsen 1982; Milner 1982). One critical measure of adaptational success - normal growth and development - reflects not only the genetic substrate of a given population but also the nutritional adequacy of its subsistence regime (Acheson 1960; Albanese and Orto 1964; Dubos 1965; Garn 1966). Differential exposure to pathogens provides initial opportunities for